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Final Environmental Impact Statement

North and West Big Hole Allotment Management Plans

Wisdom and Wise River Ranger Districts, Beaverhead-Deerlodge National Forest
Beaverhead and Deer Lodge Counties, Montana



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**North and West Big Hole Allotment Management Plans
Final Environmental Impact Statement
Beaverhead and Deer Lodge Counties, Montana**

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Abstract

The Beaverhead-Deerlodge National Forest (BDNF), Wisdom and Wise River Ranger Districts, proposes updating grazing management and infrastructure on eleven domestic livestock grazing allotments (Seymour, Fishtrap, Mudd Creek, Pintler Creek, Mussigbrod, Ruby Creek, Dry Creek, Twin Lakes, Monument, Pioneer, and Saginaw) to comply with applicable BDNF Land and Resource Management Plan (Forest Plan) direction. The North and West Big Hole Allotment Management Plans project area encompasses 170,502 acres located north and west of the Pioneer Mountains in the Big Hole and Lima-Tendoy Landscapes, about 10-30 highway miles from Wisdom Montana and about 15-70 highway miles from Wise River Montana.

Concerns identified for this project include:

- *Livestock management in riparian areas.*
- *Maintaining and/or improving westslope cutthroat trout (WCT) and western toad populations and habitat.*
- *Stream bank stability.*

Alternatives analyzed in detail include:

- *No Grazing*
- *Current Management*
- *Proposed Action*
- *Alternative 4*

This FEIS has been prepared for public review pursuant to federal laws and regulations.

Summary

The Beaverhead-Deerlodge National Forest (BDNF) proposes modifying grazing permits with updated grazing management and infrastructure for eleven domestic livestock grazing allotments (Seymour, Fishtrap, Mudd Creek, Pintler Creek, Mussigbrod, Ruby Creek, Dry Creek, Twin Lakes, Monument, Pioneer, and Saginaw) to comply with applicable 2009 BDNF Land and Resource Management Plan (Forest Plan) direction. The area affected by the proposal includes those BDNF lands, Bureau of Land Management (BLM) lands, and Montana Fish, Wildlife, and Parks (MFWP) lands that lie within the boundaries of the eleven allotments and those outlined in the 2012 Agreement for Coordination Management of Rangeland (ACMR) with the Bureau of Land Management (BLM), and the 2011 Cooperative Livestock Grazing Management Agreement (CLGMA) with MFWP for the Mount Haggin Wildlife Management area.

This action is needed to comply with management direction in the Forest Plan for livestock grazing, including site-specific suitability and Allowable Use Levels (AULs).

Four alternatives were analyzed in detail. The No Grazing Alternative is required by regulations found in the National Environmental Policy Act (NEPA) at 40 CFR 1502.14(d) and by Forest Service Handbook (FSH) 2209.13 Chapter 90. The Current Management Alternative was developed based on information disclosed in existing term grazing permits. The Proposed Action

Alternative was developed based on actions needed to comply with the Forest Plan. Alternative 4 was developed based on public and agency comments and issues.

A brief description of each alternative follows.

No Grazing - Domestic livestock grazing permits on National Forest Service (NFS) lands within the eleven allotments would be discontinued with a minimum of two years notice (36 CFR 222.4(a)(1) to permittees. No new term grazing permits for domestic livestock grazing would be issued. Unneeded infrastructure would be removed. Adjacent landowners would likely construct new fence along the Forest boundary.

Current Management - Term domestic livestock grazing permits would be issued and livestock management following current grazing practices and AULs would continue. Existing infrastructure would remain. The 2012 Agreement for Coordination Management of Rangeland (ACMR) with the BLM and the 2011 Cooperative Livestock Grazing Management Agreement (CLGMA) with Montana Fish, Wildlife, and Parks (MFWP) for the Mount Haggin Wildlife Management Area would apply. No new infrastructure would be constructed. Compliance and long-term rangeland monitoring would continue.

Proposed Action - Term domestic livestock grazing permits would be issued for all eleven allotments. Some allotments would have a change in livestock numbers, season of use (SOU), infrastructure, and/or type of grazing system. All allotments would implement site specific AULs. Compliance and long term rangeland monitoring would continue. The 2012 ACMR with the BLM and 2011 CLGMA with MFWP would continue.

Alternative 4 - In addition to features in the proposed action, this alternative includes avoidance periods, removal of cattle for 10 years on some pastures, periodic rest for those allotments without a rest rotation system already proposed or analyzed (Ruby Creek cattle and Pintler Creek) and additional infrastructure (fencing, water tanks, piping, hardened crossings, etc.).

Analysis in Chapter 3 of this EIS is, in general, summarized below by alternative.

Major conclusions:

Implementation of Design/Mitigation features and actions proposed under the *Proposed Action* and *Alternative 4* would:

- Meet applicable Forest Plan Standards for Range Management.
- Move the forest towards the Forest Wide goals for Range Management.
- Address the three concerns (livestock in riparian areas, Westslope Cutthroat Trout and Western Toad populations and habitat, and stream bank stability) identified during scoping.
- Meet the Purpose and Need for the project of updating grazing management and infrastructure on the eleven domestic livestock grazing allotments to comply with applicable Forest Plan direction.

The *No Grazing* and *Current Management* Alternatives would:

- Not meet applicable Forest Plan Standards for Range Management.
- Not move the forest towards the Forest Wide goals for Range Management.

- Not meet the Purpose and Need of updating grazing management and infrastructure on the eleven domestic livestock grazing allotments to comply with applicable Forest Plan direction.
- May address the three concerns (livestock in riparian areas, westslope cutthroat trout and western toad populations and habitat, and stream bank stability) identified during scoping.

Based upon the effects of the alternatives analyzed in detail, the responsible official will decide whether to:

- Implement the Preferred Alternative.
- Implement one of the other alternatives.
- Implement a combination of the alternatives.

Document Structure

The Forest Service has prepared this Environmental Impact Statement (EIS) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This EIS discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and other alternatives. The document is organized into four chapters:

Chapter 1. Purpose and Need for Action: This chapter includes information on history of the project proposal, purpose of and need for the project, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.

Chapter 2. Alternatives, including the Proposed Action: This chapter provides a more detailed description of the agency's proposed action as well as alternative methods for achieving the stated purpose. These alternatives were developed based on significant issues raised by the public and other agencies. This discussion also includes design features and mitigation measures. Finally, this section provides a summary table of environmental consequences associated with each alternative.

Chapter 3. Affected Environment and Environmental Consequences: This chapter describes the environmental effects of implementing the proposed action and the other alternatives. This analysis is organized by resource area by allotment.

Chapter 4. Cooperators, Consultation /Coordination, and Preparers: This chapter provides a list of preparers and agencies consulted during development of the EIS. This chapter also includes resource references and the glossary.

Appendices: Appendices provide detailed information supporting the analyses presented in the EIS such as project and resource specific maps, tables, comments, and Forest Plan Consistency.

Additional documentation, including more detailed analyses of project-area resources, is available in the project planning record located at the BDNF Supervisor's Office in Dillon, Montana.

Chapter 1 - Purpose of and Need for Action

Changes between Draft and Final

Minor grammatical, punctuation, format and other changes not influencing document content are not listed here.

- Draft EIS (DEIS) Tables 1 and 3-5 were deleted because they contain duplicative information. The previous information is found in Final EIS (FEIS) and alternative maps in Table 1 and Appendix A.

Why Here, Why Now

All eleven allotments in this project area contain lands suitable for domestic livestock grazing (See Range Section in Chapter 3). Where consistent with other multiple-use goals and objectives there is Congressional intent to allow grazing on suitable lands (Multiple-Use Sustained Yield Act of 1960, Wilderness Act of 1964, Forest and Rangeland Renewable Resource Planning Act of 1974, Federal Land Policy and Management Act of 1976, National Forest Management Act of 1976). Forage is available to qualified livestock operators from lands suitable for grazing consistent with land management plans (Forest Service Manual 2203.1(6)).

Use of forage for livestock is regulated through Allotment Management Plans (AMPs). Since existing AMPs were prepared, changes in resource condition (wildfire, drought, regrowth of past timber sales, etc.), permit administration direction (type of monitoring, Annual Operating Instructions, access to infrastructure, etc.), and regulatory requirements (1995 Recession Act, as amended [Public Law 104-19, Section 504, 109 Stat. 212], 1995 Settlement Agreement between the BDNF and Montana Wildlife Federation, Forest Plan, etc.) have occurred. The most significant change is revision of the Forest Plan in 2009, which includes a desired condition for livestock grazing of, *“People and communities benefit from programs and infrastructure that support livestock grazing...”* (Forest Plan, pg. 11).

Initially, some of the allotments (Pintler Creek, Mudd Creek, Fishtrap, and Seymour) were listed in the October 2002 Schedule of Proposed Actions (SOPA) as part of the North Big Hole AMP Project. The remaining allotments (Dry Creek, Ruby Creek, Mussigbrod, Twin Lakes, Monument, Pioneer, and Saginaw) were listed in the October 2004 SOPA as part of the West Big Hole Allotments Project.

A scoping letter for the North Big Hole AMP project was sent to interested individuals and organizations with comments due March 2004. No scoping letter was mailed for the West Big Hole Allotments project. In late 2004 both analyses were put on hold due to Forest Plan revision. In 2009, the BDNF decided to combine the previous two projects due to proximity of the allotments, revised Forest Plan direction, and to help move the BDNF towards meeting the 1995 Recession Act. The new project, called the North and West Big Hole Allotment Management Plans, was initially listed in the January 2012 SOPA.

Figure 1 and Table 1 identify the location, land ownership, and acres of the project area.

Figure 1 - Project Area General Location Map

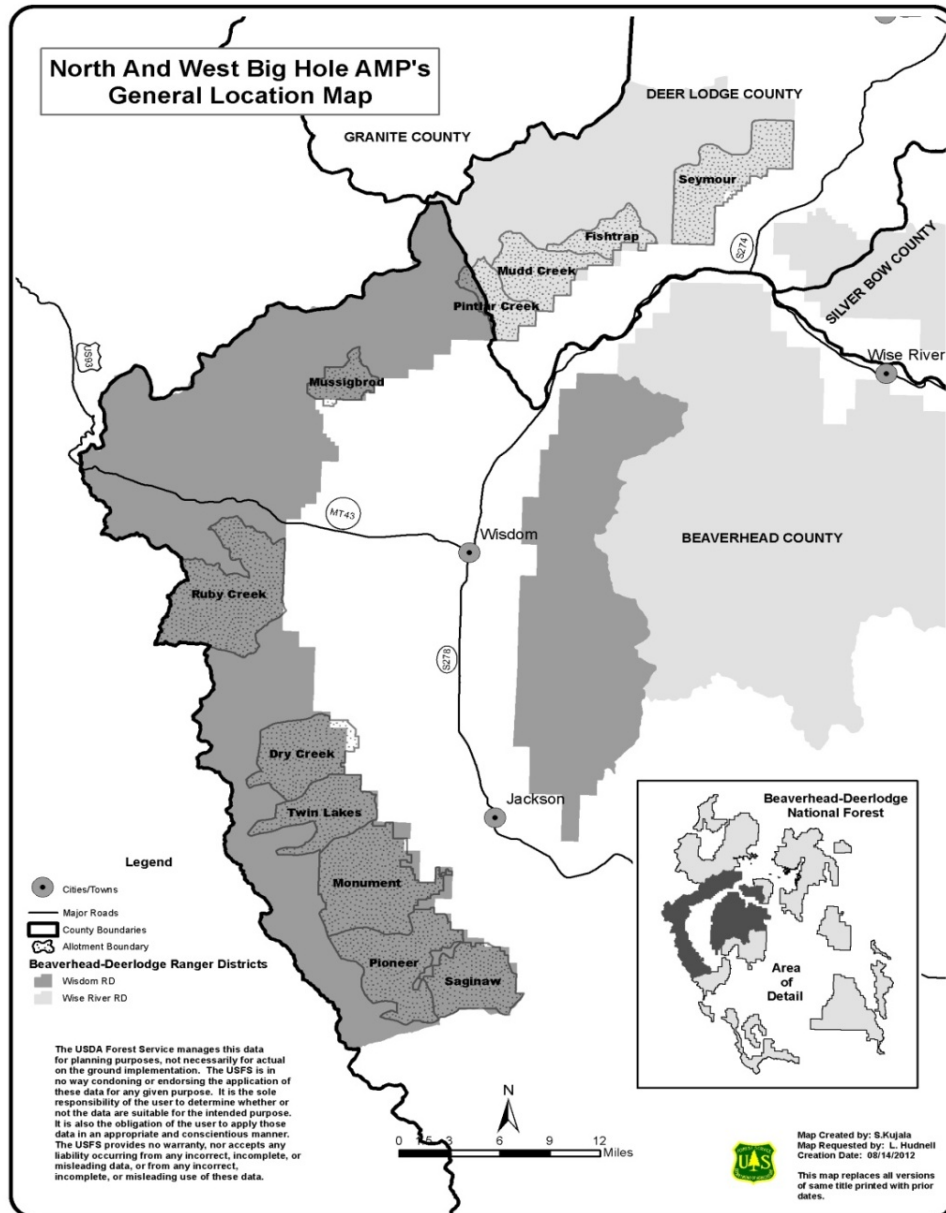


Table 1 – Land Ownership by Pasture and Allotment

Allotment	Pasture Name	Ownership Acres	Allotment Ownership Totals (acres)
Seymour	Seymour	BDNF – 8,005	BDNF - 17,772 (58%) BLM – 717 (2%) MFWP – 11,659 (38%) Private – 396 (1%) Montana – 38 (>1%) Total acres – 30,582
		BLM - 240	
		Private - 349	
		Total acres - 8,594	
	Sullivan	BDNF - 5,449	
		MFWP - 14	
		Private - 23	
		Total acres - 5,486	
	Tenmile	FS - 3,893	
		Total acres – 3,893	
	Seymour Creek	BDNF – 8	
		BLM –139	
		MFWP – 1,570	
		Private – 2	
		Total acres – 1,719	
	Sullivan Creek	BDNF – 5	
		BLM – 9	
		MFWP – 2108	
		Private – 22	
		Total acres – 2,144	
	Tenmile Creek	BDNF – 245	
		BLM – 120	
		MFWP -2795	
		Total acres – 3,160	
	Salt Ridge	BLM -12	
		MFWP – 1407	
		Total acres – 1,419	
	Mule Ranch	BLM – 82	
		MFWP – 1845	
		Total acres – 1,927	
	Moose Creek	BDNF – 167	
		BLM – 115	
		MFWP – 1920	
		Montana – 38	
		Total acres – 2,240	
Fishtrap	East Fork	BDNF - 3,382	BDNF - 6,389 (100%) Total acres– 6,389
		Total acres - 3,382	
	West Fork	BDNF - 3,007	
		Total acres - 3,007	
Mudd Creek	Mudd Creek	BDNF - 11,465	BDNF - 11,465 (99%)

Allotment	Pasture Name	Ownership Acres	Allotment Ownership Totals (acres)
		Private - 154	Private – 154 (1%)
		Total acres - 11,619	Total acres - 11,619
Pintler Creek	Pintler Creek	BDNF - 7,452	BDNF - 7,452 (100%)
		Total acres – 7,452	Allotment - 7,452
Mussigbrod	Bender	BDNF - 1,453	BDNF - 5,037 (96%) BLM – 208 (4%) Total acres - 5,245
		BLM - 173	
		Total acres - 1,626	
	Mussigbrod	BDNF - 3,584	
		BLM - 35	
		Total acres - 3,619	
Ruby Creek	Butler	BDNF - 3,926	BDNF - 25,355 (94%) BLM – 42 (>1%) Private - 1,476 (6%) Allotment - 26,873
		Total acres - 3,926	
	Cow Creek	BDNF - 9,652	
		Private - 1,052	
		Total acres - 10,704	
	Lower Ruby	BDNF - 11,777	
		BLM - 42	
		Private - 424	
Dry Creek	Lower Dry Creek	Total acres – 12,243	
		BDNF - 2,747	BDNF - 13,991 (93%) BLM - 1,012 (7%) Private – 27 (>1%) Total acres - 15,030
		BLM - 1,012	
		Private - 27	
		Total acres - 3,786	
	Upper Dry Creek	BDNF - 11,244	
		Total acres - 11,244	
Twin Lakes	Lower Big Lake	BDNF - 2,924	BDNF - 12,701 (100%) Private – 15 (>1%) Total acres - 12,716
		Total acres - 2,924	
	Lower Little Lake	BDNF - 3,432	
		Private - 15	
		Total acres - 3,447	
	Upper Big Lake	BDNF - 4,565	
		Total acres - 4,565	
	Upper Little Lake	BDNF - 1,780	
Monument	Hamby Creek	Total acres - 1,780	BDNF - 23,217 (100%) BLM – 122 (>1%) Private – 4 (>1%) Total acres - 23,343
		BDNF - 14,043	
		Private - 4	
	Miner Creek	Total acres - 14,047	
		BDNF - 8,967	
		BLM - 122	
	Not a Pasture Special Use Area	Total acres - 9,089	
		BDNF - 207	
Pioneer	Pioneer	Total acres - 207	FS - 18,424 (99%) Private – 226 (1%)
		BDNF - 9,855	

Allotment	Pasture Name	Ownership Acres	Allotment Ownership Totals (acres)
		Private - 214	Total acres - 18,650
		Total acres - 10,069	
	Skinner Meadows	BDNF - 5,264	
		Total acres - 5,264	
	Van Houten	BDNF - 3,305	
		Private - 12	
		Total acres - 3,317	
Saginaw	Pasture 1	BDNF - 1,573	BDNF - 12, 508 (99%) Private – 95 (1%) Total acres - 12,603
		Private - 76	
		Total acres - 1,649	
	Pasture 2	BDNF - 3,908	
		Private - 19	
		Total acres - 3,927	
	Pasture 3	BDNF - 3,585	
		Total acres - 3,585	
	Pasture 4	BDNF - 3,442	
		Total Acres - 3,442	
All Allotments	All Pastures	BDNF – 154,311 (91%)	Total acres – 170,502
		BLM – 2,101 (1%)	
		MFWP – 11,659	
		Private – 2,393 (7%)	
		Montana – 38 (>1%)	

Forest Plan Direction

The 2009 Beaverhead-Deerlodge National Forest Land and Resource Management Plan, (Forest Plan), provides management direction for this project. The Forest Plan describes forest-wide desired condition (pg. 11), goals and standards for livestock grazing (pgs. 25-27), a general description and activities for the Big Hole and Lima-Tendoy Landscapes (pgs. 65 & 181) and management focus, objectives and additional standards for the Big Hole and Lima-Tendoy Management Areas (pgs. 66-88 & 182-196). The North and West Big Hole AMP EIS tiers to the analysis disclosed in the Corrected Final Environmental Impact Statement (CFEIS) for the Forest Plan

Applicable Forest Plan direction and other designations are summarized in Table 2.

Table 2 – Applicable Forest Plan and Other Designations Summary by Allotment

Allotment	Landscape	Management Area	6th Code HUC ¹	Fish Key Watershed	Restoration Key Watershed	Wilderness	Recommended Wilderness	IRA ²	Hunting Unit
Seymour	Big Hole	Fishtrap-Mount Haggin	Deep Creek, LaMarche Creek, Seymour Creek	Yes	Yes	No	No	Yes	319
Fishtrap	Big Hole	Fishtrap-Mount Haggin	Fishtrap Creek	No	No	No	No	Yes	319
Mudd Creek	Big Hole	Fishtrap-Mount Haggin, APW	BHR-F, BHR-SC, Mudd Creek	No	No	Anaconda-Pintler	No	Yes	319
Pintler Creek	Big Hole	APRWA, APW, Pintler Face, Fishtrap-Mount Haggin	Pintler Creek	No	No	Anaconda-Pintler	No	Yes	319, 321
Mussigbrod	Big Hole	APRWA, Pintler Face, Tie-Johnson	Johnson Creek, Mussigbrod Creek	Yes	No	No	Anaconda-Pintler Addition Hellroaring	Yes	321
Ruby Creek	Big Hole	Anderson Mountain, Ruby, West Big Hole	Ruby Creek, West Fork Ruby Creek	No	Yes	No	No	Yes	321
Dry Creek	Big Hole	West Big Hole Flats, West Big Hole	BHR-BSC, Big Lake Creek, Upper Rock Creek	No	No	No	No	Yes	321
Twin Lakes	Big Hole	West Big Hole Flats, West Big Hole	Big Swamp Creek, BHR-BSC, Little Lake Creek	No	No	No	No	Yes	321
Monument	Big Hole	West Big Hole Flats, West Big Hole	BHR-SpC, Englehard Creek, Little Lake Creek, Miner Creek	No	No	No	No	Yes	321
Pioneer	Big Hole	West Big Hole Flats, West Big Hole, Selway-Saginaw	Berry Creek, BHR-SaC, BHR-SpC, HBHR	No	Yes	No	No	Yes	321, 329
Saginaw	Big Hole and Lima-Tendoy	West Big Hole Flats, Selway-Saginaw	BHR-SaC, HBHR, Upper Governor Creek	No	Yes	No	No	Yes	329

¹ HUC = Hydrologic Unit Code

² IRA = Inventoried Roadless Area

Purpose and Need for Action

The purpose of this proposal is to:

- Update grazing management and infrastructure on eleven domestic livestock grazing allotments (Seymour, Fishtrap, Mudd Creek, Pintler Creek, Mussigbrod, Ruby Creek, Dry Creek, Twin Lakes, Monument, Pioneer, and Saginaw) to comply with applicable Forest Plan direction.

This action is needed to comply with management direction in the Forest Plan for livestock grazing including site-specific suitability and Allowable Use Levels (AULs). This action responds to goals and objectives outlined in the Forest Plan and helps move the project area towards desired conditions (Forest Plan, pg. 11). This project also helps move the BDNF towards achieving the following Forest Plan (pg. 25) goals for livestock grazing:

- Providing sustainable grazing opportunities for domestic livestock from lands suitable for forage production. This is partially accomplished by the suitability analysis disclosed in the Range section (Chapter 3) of this EIS.
- Maintaining or enhancing the desired structure and diversity of plant communities on grasslands, shrub lands, and forests with the use of forage by domestic livestock. Use would be managed to maintain or restore riparian function as defined in the allotment management plan. This is accomplished partially with proposed site specific AULs, changes in season of use (SOU), rest and avoidance periods and mitigation/design features.

The December 2012 Seymour, Sullivan, and Deep Creeks Watershed Assessment (pgs. 175-179 & 198) makes two recommendations that apply to the Seymour Allotment. The first recommendation - reconstruction of about 4 miles of the Tenmile pasture boundary fence between the BDNF and Mount Haggin Wildlife Management Area (WMA) - was completed in 2010.

This proposed action would fulfil the remaining recommendation to continue managing the Seymour Allotment as described in the Cooperative Livestock Grazing Management Agreement (CLGMA) between the BDNF and MFWP.

Proposed Action - Summary

Actions proposed by the BDNF to meet the above purpose and need include updating AMPs for all eleven allotments to maintain or achieve desired land condition. Under this alternative, livestock grazing would be authorized following grazing practices designed to comply with the Forest Plan.

In summary, the proposed action authorizes continued livestock grazing on the Seymour, Fishtrap, Mudd Creek, Pintler Creek, Mussigbrod, Ruby Creek, Dry Creek, Twin Lakes, Monument, Pioneer and Saginaw Allotments following prescribed grazing systems and limiting forage consumption by prescribing AULs based on existing stream conditions (see Table 4). As proposed, cattle are moved to the next pasture or removed from the allotment when any of the

AULs are met (forage utilization, stream bank disturbance, stubble height or woody browse utilization). The BDNF estimates 5,666 head months³ would be authorized to graze allotments each year in the project area. Actual livestock numbers and season of use would vary annually depending on weather patterns, forage production and on-the-ground livestock management. The proposed action would also construct an additional 0.3 miles of fence, 3 water developments, 1 enclosure and 3 hardened crossings.

Under the proposed action, livestock management practices for the Mussigbrod and Dry Creek Allotments would continue to be coordinated with adjacent BLM lands as described in the 2012 Agreement for Coordination of Management of Rangeland (ACMR). For the Seymour Allotment, livestock management practices would continue to be coordinated with adjacent BLM lands and the Mount Haggin WMA as described in the 2011 Cooperative Livestock Grazing Management Agreement (CLGMA) with MFWP.

Chapter 2 provides a detailed description of alternatives considered in detail, including the proposed action.

Decision Framework

The District Ranger is the responsible official and will decide, given the purpose and need, review of alternatives, environmental consequences, and public comments, if:

- *The preferred alternative meets the purpose and need with the fewest affects to resources or will the purpose and need be better met with fewer affects to resources with another alternative or combination of alternatives.*

This EIS does not make a decision. It discloses the environmental consequences of implementing one or a combination of the alternatives. The decision will be disclosed in the Record of Decision (ROD).

The decision will focus on maintaining or achieving desired land conditions and includes two parts:

1. Whether livestock grazing should be authorized on all, part, or none of the project area, and
2. If the decision authorizes some level of livestock grazing, what management prescriptions would be applied (including standards, guidelines, grazing management and monitoring) to ensure desired condition objectives are met or movement occurs towards achieving those objectives in an acceptable timeframe (FSH 2209.13_92.21).

AMPs will be written for each allotment to implement the decision documented in the ROD. Upon completion, the AMP becomes a term and condition of the grazing permit (FSH 2209.13_94.1).

For the Seymour Allotment, this decision will not prescribe grazing practices on six pastures located on the Mount Haggin WMA. These pastures, including AULs, are managed by MFWP. The grazing system and rotation of livestock are coordinated between MFWP and the BDNF

³ A head month is one mature animal for one, 30-day month. For example 100 cow/calf pairs grazing an allotment for 90 days equals 300 head months.

through the CLGMA. AULS, permitted numbers and season of use for the Tenmile Creek, Sullivan Creek, Seymour Creek, Salt Ridge, Moose Creek and Mule Ranch are determined by MFWP. However, the decision will prescribe grazing practices for the Seymour, Sullivan and Tenmile pastures located on the BDNF (please refer to allotment maps in Appendix A1).

Public Involvement

A Notice of Intent (NOI) was published in the Federal Register on August 17, 2012. The NOI asked for public comment on the proposal by September 17, 2012. The BDNF received comments from five individuals and five groups and/or other government agencies. Using these comments, the interdisciplinary team (ID team) developed a list of issues (see *Issues* section below) needing addressed.

On March 20, 2014, the Draft EIS (DEIS) on CD-ROM was mailed to more than 80 interested individuals and organizations along with a letter providing an opportunity to submit comments on the DEIS. The DEIS and all appendices were also posted on the BDNF webpage. A Notice of Availability was published in the March 28, 2014 Federal Register initiating a 45-day public comment period ending May 12, 2014. At the request of Western Watersheds Project, the comment period was extended until June 2, 2014. Nine individuals and organizations provided written comments during this period.

Issues

The BDNF separated scoping comments into five categories: Actions, Alternatives, Analysis, Scope of the Project, and Statement-no-cause-effect. Comments listed as Statements no cause-effect (i.e. ungulate wildlife has been devastated by the wolves, all these cattle should be thrown off national lands, have no significant issue with the current scope outlined, etc.) did not contain concerns that were specific. Comments received during scoping and how they were addressed are disclosed in Appendix C.

The remaining four categories contained comments that shared concerns in one of the following areas, which led to the development of Alternative 4:

Livestock management in riparian areas- Concerns focused on impacts livestock can have to water quality and soil stability in riparian areas. Under the Proposed Action and Alternative 4, site specific AULs (based on functioning condition of the stream), avoidance periods, exclosures, proposed periods of rest, and monitoring help minimize impacts to riparian areas.

Maintaining and/or improving westslope cutthroat trout (WCT) and western toad populations and habitat – Concerns focused on changes in habitat potentially caused by livestock grazing for WCT and western toad and impacts the habitat changes may have to populations. Under the Proposed Action and Alternative 4, site specific AULs, avoidance periods, exclosures, proposed periods of rest, monitoring, and allotment specific design/mitigation measures would help minimize impacts to aquatic habitat and populations.

Stream bank stability – Concerns focused on effects of livestock grazing on stream bank stability. Under the Proposed Action and Alternative 4, site specific AULs, (stream bank disturbance is a parameter determining when livestock move to a different pasture or leave the allotment), avoidance periods, exclosures located to keep livestock off stream banks needing rehabilitation, extended periods of rest (up to 10 years), and allotment specific design/mitigation measures (designed to help recover stream banks) further minimize impacts to stream banks.

Chapter 2 - Alternatives

This chapter describes and compares alternatives considered for the North and West Big Hole Allotment Management Plans project. This chapter defines the differences between each alternative and provides a clear basis for choice among the alternatives for the decision maker and the public.

Changes between Draft and Final

Minor grammatical, punctuation, format and other changes not influencing document content are not listed here.

- Descriptive errors of the No Grazing alternative were corrected. Maintenance requirements for unneeded range structures (fences, water tanks, etc.) were removed. Mitigation was added to the alternative that unneeded structures would be removed as need and funding allows for mitigation of resource conflicts.
- References to Allowable Use Levels (AULs) for big game winter range were removed because the allotments do not include any big game winter range.
- The monitoring section was updated
- DEIS Table 8 was deleted and replaced with text and bullet statement succinctly describing alternatives considered but eliminated from detailed study.
- DEIS Table 9, summarizing changes by alternative and allotments, was deleted and replaced with FEIS Table 6 summarizing substantive changes between alternatives.
- DEIS Tables 13 and 14 were deleted because they provided duplicative information from DEIS Tables 11 and 12 (FEIS Table 4 and Table 5).
- DEIS Table 15 was deleted because it provided duplicative information. Allotment specific monitoring was provided in DEIS Tables 16-27 (FEIS Table 7 through Table 18).
- DEIS Comment 4-1 considered the complexity of the proposal and analysis. In response to this comment, alternative descriptions have been re-written in an attempt to promote better understanding by readers.
- Alternative descriptions include differences between periodic, extended and rotational rest from livestock grazing.
- Range infrastructure (water developments, fences, etc) proposed in the alternatives was changed to reflect more up-to date data.
- Design criteria/mitigations for wildlife were updated for the Proposed Action and Alternative 4 as there were a few omissions. This will not change the analysis.

Alternatives

Alternatives Considered But Eliminated From Detailed Study

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and briefly discuss reasons for eliminating alternative(s) not developed in detail (40 CFR 1502.14).

Scoping comments received in response to the Proposed Action provided suggestions for alternative methods for achieving the Purpose and Need. Appendix C explains how these recommendations were incorporated into one of the four alternatives analyzed in detail.

Other alternative considered but eliminated from detailed study include:

- Developing alternatives based on the number of livestock grazed and time period grazed. This process would develop alternatives with a range of permitted head months. These alternatives were eliminated from detailed study because they do not provide different grazing practices designed to maintain or achieve desired resource conditions and do not address annual variations in weather patterns, forage productions and on-the-ground livestock management. They are also inconsistent with policy in Forest Service Handbook 2209.13, Chapter 90.
- Authorizing livestock management based on current permitted numbers and season. This alternative would increase the number and amount of time livestock graze the project area. Expected use levels would exceed those currently allowed, would not maintain or achieve desired resource conditions nor would this action help achieve Forest Plan goals and objectives.

Alternatives Considered in Detail

Four alternatives are considered in detail:

1. No Grazing,
2. Current Management,
3. Proposed Action, and
4. Alternative 4

Each alternative is described in further detail below. Important elements of each alternative are further described in the allotment specific information disclosed in Table 7 through Table 18.

The alternatives provide different livestock grazing practices to maintain or achieve desired resource conditions, primarily by prescribing different Allowable Use Levels (AULs). For the current management alternative, proposed action and Alternative 4, livestock would be moved to the next pasture or removed from the allotment when one of the AULs are met. Livestock numbers, season of use and head months are estimated and expected to vary annually depending on weather patterns, forage production and on-the-ground management. For example, livestock may not begin grazing an allotment on the permitted turn-out date if an unusually cold spring delays plant development, or livestock may leave an allotment early if unusually dry weather reduces forage production. Conversely, above normal precipitation and temperatures leading to increased forage production and/or more effective livestock management practices that prevent cattle from congregating in preferred areas could lead to an extension to the season.

No Grazing Alternative

The “No Action/No Grazing” alternative is required by the National Environmental Policy Act (NEPA), regulations at 40 CFR 1502.14(d) and policy in Forest Service Handbook (FSH) 2209.13 Chapter 90.

Under the no grazing alternative, AMPs would not be updated. Term grazing permits authorizing domestic livestock to graze on National Forest System (NFS) lands on the Seymour,

Fishtrap, Mudd Creek, Pintler Creek, Mussigbrod, Ruby Creek, Dry Creek, Twin Lakes, Monument, Pioneer, and Saginaw Allotments would be cancelled⁴ with a minimum of two years notice (36 CFR 222.4(a)(1)) to permittees. Existing agreements (2012 ACMR and 2011 CLGMA) with BLM and MFWP would be terminated.

Please refer to Table 7 through Table 18 for specific, detailed actions proposed for each allotment.

No Grazing Alternative Design Features/Mitigation Measures

The following Design Features/Mitigation Measures apply to all allotments under this alternative:

1. Private and/or other non-NFS lands included in these allotments could continue to be grazed at the landowner's discretion. However, the livestock owner would be required to keep livestock off NFS lands.
2. Unneeded rangeland infrastructure (interior fences, water tanks, exclosures, etc.) would be removed following livestock removal as funding is available or resources concerns are identified. If an improvement such as a stock tank or spring development is needed for other purposes (ie. wildlife) the structure would not be removed. In this instance, the BDNF or other appropriate parties would assume maintenance responsibilities.
3. On allotments with shared management between the National Forest and other federal or state agencies, the BDNF would follow guidelines set forth in existing agreements for maintenance of fencing and other infrastructure.

Current Management

Under the Current Management Alternative, AMPs would be updated to reflect current grazing practices from the past 5 years. The Forest Plan (pg. 26) prescribes interim livestock grazing standards until specific long-term objectives, prescriptions or AULs have been designed through site-specific NEPA decisions. These interim standards have been implemented in the project area since 2009 and actual livestock use (numbers and season) have been annually adjusted to avoid exceeding the interim standards. If the Current Management Alternative is selected for implementation, the interim standards would become AULs incorporated into AMPs and terms and conditions of the grazing permits. Permitted livestock numbers and season of use would be adjusted accordingly.

Existing prescribed grazing systems would continue. Existing infrastructure (fences and water developments) would be maintained in functioning condition and reconstructed as needed. BLM lands fenced in with the Mussigbrod and Dry Creek Allotments would be managed under the same standards as the BDNF lands as agreed to in the 2012 ACMR. For the Seymour Allotment, grazing systems and livestock rotation would continue to be coordinated with MFWP as described in the 2011 CLGMA (Table 8).

Please refer to Table 7 through Table 18 for specific, detailed actions proposed for each allotment.

⁴ Pursuant to 36 CFR 222.4(a)(1), current permit holders would be notified two years prior to permit cancellation.

Table 3 - Current Management Alternative AULs

Category	Season Long or Continuous	Deferred or Rest Rotation	Area	Key Species ⁵
Upland range utilization	≤ 40% of forage utilized on suitable range on 85% of the area. ≤ 50% utilization on the remaining 15%	≤ 55% of forage utilized on suitable range on 85% of the area. ≤ 65% utilization on remaining 15%	Suitable range.	Idaho fescue, bluebunch wheatgrass, rough fescue
Streambank Disturbance	≤ 25% streambank disturbance measured by reach	≤ 30% streambank disturbance measured by reach	85% of riparian habitat, by stream reach, within suitable range for each pasture. 5% of riparian habitat could exceed standards on a repeat basis (crossings)	N/A
Riparian Stubble Height	Green Line ≥ 6" measured by reach, flood plain ≥ 4" measured by reach	Green Line ≥ 4" measured by reach, flood plain ≥ 3" measured by reach	85% of riparian habitat, by stream reach, within suitable range for each pasture	Sedges, rushes, bluejoint reedgrass, tufted hairgrass.
Riparian Sites on Streams Containing WCT populations	≤ 20% Streambank disturbance by reach	≤ 45% of forage utilized on suitable range on 85% of the area. Allow no more than 65% utilization on remaining 15%	85% of riparian habitat, by stream reach, within suitable range for each pasture. 5% of riparian habitat could exceed standards on a repeat basis (crossings)	Sedges, rushes, bluejoint reedgrass, tufted hairgrass.

Current Management Alternative Design Features/Mitigation Measures

The following Design Features/Mitigation Measures apply to all allotments under this alternative.

1. AULs displayed in Table 3 would apply on NFS Lands and co-managed BLM lands. When any of the AULs are reached, livestock would be moved to the next pasture or off the allotment.

⁵ Other species may be used for specific allotments

2. Existing infrastructure would be maintained at a level that serves their intended purposes. (i.e. pipelines servicing tanks would be cleaned as needed to maintain water to the tank, existing wildlife escape ramps would be maintained, etc.).
3. Ground disturbing activities (i.e., construction of water developments, livestock management facilities, fencing, etc.) associated with implementing AMPs are subject to compliance with Section 106 of the National Historic Preservation Act and require intensive cultural resources inventory (Class III) prior to implementation. Identification and avoidance of cultural resources by project abandonment or redesign would mitigate direct impacts from project implementation. Appropriate protection measures would be added to ground disturbing activities.
4. Should cultural resources be identified during the course of project implementation, operations would cease and a BDNF archaeologist notified to complete resource documentation and eligibility evaluation.
5. Appropriate population protection measures for sensitive plant species would be added to ground disturbing activities.

Proposed Action

Under the Proposed Action Alternative, AMPs would be updated to incorporate AULS based on existing stream conditions (see Table 4 and Table 5). The updated AMPS would become terms and conditions of the grazing permits and permitted livestock numbers and season of use would be adjusted accordingly.

Existing prescribed grazing systems would continue with the following changes:

- The Seymour Allotment would continue following a rest rotation system. However, livestock would graze the Tenmile pasture (BDNF) once every 3 years. As a result, the Tenmile pasture (BDNF) would be incorporated into the existing rotation system and an additional 75 head of cattle would be permitted to graze.
- Livestock entry on the Pintler Allotment would be deferred every other year.
- The Mussigbrod Allotment would be rested once every three years.
- The Butler Pasture on the Ruby Creek Allotment would be rested once every three years from grazing by horses.
- The Dry Creek Allotment would be rested once every three years.

Existing infrastructure (fences and water developments) would be maintained in functioning condition and reconstructed, as needed. About 0.3 miles of new fence, 1 new enclosure, 3 hardened crossings and 3 new water developments would be constructed. BLM lands fenced in with the Mussigbrod and Dry Creek Allotments would be managed under the same standards as the BDNF land as agreed to in the 2012 ACMR. Allotment grazing systems and livestock rotation would continue to be coordinated with MFWP as described in the 2011 CLMGA (Table 8).

Please refer to Table 7 through Table 18 for specific, detailed actions proposed for each allotment.

Table 4 - AULs based on Existing Condition

Riparian Parameter	PFC or F-A-R⁶ with a static or upward trend	F-A-R with a downward trend	Non-Functioning
Forage Utilization	≤ 45% of forage utilized on suitable range on 85% of the area. Allow no more than 65% utilization on remaining 15%.	≤ 40% of forage utilized on suitable range on 85% of the area. Allow no more than 55% utilization on remaining 15%.	≤ 35% of forage utilized on suitable range on 85% of the area. Allow no more than 50% utilization on remaining 15%
Stream bank Disturbance	≤ 30%	≤ 25%	20 – 25%
Stubble Height	leave 4" on green line and ≥ 3" in floodplains	leave 4-6" on green line and ≥ 4" in floodplains	leave 4-6" on green line and ≥ 4" in floodplains
Woody Browse Utilization ⁷	Move cattle at shift in vegetation preference	Move cattle at shift in vegetation preference	Move cattle at shift in vegetation preference

Table 5 – Upland AULs for Proposed Action and Alternative 4

Upland Parameters	Deferred or Rest Rotation	Area and Key Species
Upland Range Utilization	≤ 55% of forage utilized on suitable range on 85% of the area. ≤ 65% utilization on remaining 15%.	Suitable range, Idaho fescue, bluebunch wheatgrass, rough fescue, or other species deemed appropriate

Proposed Action Design Features/Mitigation Measures applicable to all allotments

The following Design Features/Mitigation Measures would apply to all allotments under this alternative.

1. As identified in 36 CFR 222.4, permittees would have one year to comply with proposed modifications.
2. AULs in Table 4 and Table 5 were developed based on site specific range, hydrology, and aquatic field and trend data for upland, aquatic, and riparian areas. AULs would apply on NFS Lands and co-managed BLM lands.
3. Infrastructure would be maintained at a level that serves their intended purpose (i.e. pipelines that service the tanks would be cleaned as needed to maintain water to the tank, existing wildlife escape ramps would be maintained, etc.).
4. When any of the AULs are reached, livestock would be moved to the next pasture or off the allotment.
5. The permitted on date (date livestock are authorized to enter the allotment) could be adjusted to assure vegetative development is adequate prior to livestock grazing. Actual

⁶ F-A-R = Functioning-At-Risk

⁷ Woody browse AULs also apply to riparian and upland woody species, including aspen.

on or off dates would be adjusted on an annual basis to provide for range readiness or mitigate prior season grazing effects, current season forage production, weather, or other conditions when necessary.

6. Ground disturbing activities (i.e. construction of water developments, etc.) associated with implementing the AMPs are subject to compliance with Section 106 of the National Historic Preservation Act and would require intensive cultural resources inventory (Class III) prior to implementation. Identification and avoidance of cultural resources by project abandonment or redesign would mitigate direct impacts from project implementation. Appropriate protection measures would be added to ground disturbing activities.
7. Should cultural resources be identified during the course of project implementation, operations would cease and a BDNF archaeologist notified to complete resource documentation and evaluate eligibility.
8. New water developments would be spring developments with head boxes, <300 feet of piping for gravity feed to a water tank with posts and rails around the tank for protection and stabilization, and <0.1 mile of fencing around the spring to exclude livestock from the spring source. Tanks would include escape ramps and a mechanism, such as a float or shut-off valve, controlling water flow to reduce potential impacts to sage-grouse and other birds (USDA FS 2012). Existing water tanks with no wildlife escape ramps would be retro-fitted to meet requirements.
9. New spring water developments in sage grouse habitat would be designed to maintain free water and wet meadows and include escape ramps and a mechanism, such as a float or shut-off valve, controlling water flow in tanks and troughs to reduce potential impacts to sage-grouse and other birds (USDA FS 2012).
10. New water developments would use non-reflective and earth-tone color materials in construction and installation. Darker, earth-tone fiberglass tanks are recommended to reduce color contrast with the surrounding environment.
11. Infrastructure development, watershed restoration and habitat restoration projects will occur outside of the Spring Period (April 1-June 1) or completed in less than 1 day in riparian areas; project does not result in an increase in user type; motorized vehicle use occurs on existing open roads or if on restricted roads, use does not exceed admin use levels (6 trips per week or 30 day window). Day use only or camping of less than 20 individuals and less than 5 days in the analysis area should be followed.
12. Mechanical Equipment - Activity occurs outside of spring period (April 1-June 1) and within 500 meters of an open or restricted road.
13. New fencing would follow recommended fence specifications outlined in the Forest Service GTR 2400-Range 8824 2803 (USFS 1988).
14. New range improvements (fences and water developments) would be designed to avoid or reduce impacts to known sensitive plant populations (i.e. constructing riparian or spring exclosure fences to include plant populations, placement of water troughs 200 feet or greater from known populations, routing water pipe around known populations, etc.).
15. Appropriate protection measures would be added to ground disturbing actions to protect sensitive plant populations.

Alternative 4

Alternative 4 was developed in response to public and agency comments received during the scoping period. Under Alternative 4, AMPs would be updated to incorporate AULs based on existing stream condition (see Table 4 and Table 5), as previously described for the Proposed

Action. The updated AMPs would become terms and conditions of the grazing permits and permitted livestock numbers and season of use would be adjusted accordingly.

Existing infrastructure (fences and water developments) would be maintained in functioning condition and reconstructed, as needed. About 0.7 miles of new fence, 3 hardened crossings and 3 new water developments would be constructed. BLM lands fenced in with the Mussigbrod and Dry Creek Allotments would be managed under the same standards as the BDNF land as agreed to in the 2012 ACMR. Allotment grazing systems and livestock rotation would continue to be coordinated with MFWP as described in the 2011 CLMGA (Table 8).

Design Features/Mitigation Measures previously described for the Proposed Action would also apply to all allotments under Alternative 4.

All allotments would have prescribed grazing systems that incorporate periodic rest⁸ from livestock grazing. In addition, the following actions would occur under Alternative 4:

- To remove potential impacts from livestock grazing to stream banks, during stream restoration action (described below), Pintler Meadows (Pintler Creek Allotment) and the Bender Creek Riparian Area within the Bender Creek Pasture (Mussigbrod Allotment) would be rested from livestock grazing for 10 years or until desired conditions or restoration resource objectives are met.
- On the Pintler Creek Allotment, livestock entry would be deferred every other year until approximately August 1 and a designated "Special Area" in Section 18 would be grazed once every 3 years up to 20 head months for up to 14 days with variable entry dates. Periodic rest would be incorporated across all areas of the allotment as necessary.
- On the Ruby Creek Allotment, periodic rest from livestock grazing would be incorporated into the cattle deferred grazing system and livestock entry deferred in the Cow Creek pasture until about August 1 every other year.
- On the Seymour Allotment, the Tenmile pasture (BDNF) would be grazed once every 3 years after August 25.
- Avoidance periods to mitigate potential livestock trampling impacts to incubating and emerging WCT, would be incorporated into the grazing system for the Saginaw Allotment.

Please refer to Table 7 through Table 18 for specific, detailed actions proposed for each allotment.

Alternative 4 Design Features/Mitigation Measures in Addition to Those Listed for the Proposed Action

The following design features/mitigation measures are proposed with Alternative 4 to assist in recovering stream banks in Pintler Meadows of the Pintler Creek Allotment and the Bender Pasture of the Mussigbrod Allotment. See alternative maps in Appendix A1 for the location of these activities.

⁸ Seymour and Saginaw AMPs would not be modified to incorporate periodic rest. Both allotments are already managed following rest rotation grazing systems. Under Alternative 4, periodic rest would continue.

- Cut/clip 500–1,000 willow cuttings from various nearby streams (Pintler, Bender, a tributary of Bender, and Johnson Creeks) and plant willows along 1,000 feet of stream.
- Seed with native plants in areas above bank full as needed along the 1,000 feet of stream.
- Install grade control structures (i.e., native boulder/log weirs) using heavy equipment. Use local materials within ¼ mile of the site in Bender Pasture as applicable along the 1,000 feet of stream during low water period. Grade control structures would be placed to stop current headcutting, recover vertical stability of the channel and reconnect historic floodplain.
- In accordance with minimum tools assessment, only hand or primitive (horse drawn) tools would be used in Pintler Meadows.
- Obtain applicable permits from Montana Department of Environmental Quality to work in the stream and modify the stream bank in Bender pasture.
- New fencing for a drift fence in Pintler or conversion of the temporary fence to a permanent fence in Mussigbrod would be log worm fences with 3 logs per panel, 16 feet long, and greater than 12 inches dbh (diameter at breast height) for a distance of 1,584 to 4,805 feet. Fence specifications outlined in Forest Service GTR 2400-Range 8824 2803 (USFS 1988) would be followed.

Pintler Creek Allotment would have the following scenery features applicable to Alternative 4:

- Avoid creating openings or damaging remaining trees when removing trees for fencing to minimize visible changes to the remaining stand.
- Scatter limbs and tops so as not to be evident as slash. Distributing this material throughout the area would reduce the overall effect of the activity.
- Cover stumps of cut trees with soil/duff to reduce contrast with the surrounding area.

Mussigbrod Allotment would have the following scenery features applicable to Alternative 4:

- Select trees to be cut such that the effects of removal and removal of limbs and tops would not be visible from identified CL1 and 2 viewing platforms.

Monitoring

Allotment specific monitoring is described in Table 7 through Table 18.

Comparison of Alternatives

Table 6 compares and summarizes key features of each alternative considered in detail. This table is intended to allow readers to quickly compare the alternatives. Readers are cautioned that this is a summary and displays figures for the entire project area – not individual allotments. Please refer to the previous alternative descriptions and Table 7 through Table 18 for details specific to each allotment.

Table 6 – Comparison of Alternatives

Description Item	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Permittees	0	17	17	17
Pastures	0	32	33	33
Co-Managed/ partners	0	BLM & MFWP	BLM & MFWP	BLM & MFWP
Head Months	0	5754	5666	5521
Livestock	0	2901	2753	2678
Grazing System	0	Deferred – Fishtrap, Mudd Cr, Pintler Cr, Mussigbrod, Ruby Cr ⁹ , Monument, Dry Cr., Pioneer	Deferred – Fishtrap, Mudd Cr, Pintler Cr, Ruby Cr ¹⁰ , Monument, Pioneer	Extended Rest – Pintler Meadows and Bender Creek
				Deferred with periodic rest - Pintler Cr & Ruby Cr cattle
		Rest Rotation – Seymour, Twin Lakes ¹¹ , Saginaw	Rest Rotation – Seymour ¹² , Mussigbrod, Twin Lakes, Dry Cr, Saginaw	Rest Rotation – Seymour ¹² , Mussigbrod, Twin Lakes, Dry Cr, Saginaw, Fishtrap, Mudd Cr, Monument, Pioneer
Allowable Use Levels (AUL)	0	Table 3 –Forest Plan Interim Standards	Table 4 - Site specific based on PFC ¹³ & trend	Table 4 - Site specific based on PFC & trend
Miles of Fence	93.5	148.4	148.7	149.4
Developed Water	0	19	22	22
Exclosures	0	15	16	15
Hardened Crossings	0	0	3	3
Other	-	-	-	-Avoidance period for incubating WCT on Saginaw and Seymour -Stream restoration projects in Pintler Meadows & Bender Creek

⁹ Butler Pasture would be grazed season-long by horses

¹⁰ Butler Pasture would be rested once every three years from grazing by horses

¹¹ Upper and Lower Big Lake pastures would be grazed using a deferred rotation system

¹² Tenmile Pasture (BDNF) may be grazed by livestock once every 3 years.

¹³ PFC = Proper Functioning Condition

Allotment Specific Actions by Alternative

Table 7 – Seymour Allotment

Seymour					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Permittees	3	0	3	3	3
Pastures	N/A	0	8	9	9
Co-Managed/ partners	N/A	N/A	BLM/MFWP	BLM/MFWP	BLM/MFWP
Head Months	1410 ¹⁴	0	297 on BDNF consistent with CLGMA	297 on BDNF consistent with CLGMA	297 on BDNF consistent with CLGMA
Livestock (cow/calf pairs)	398	0	323	398	323
Season of Use	6/16- 10/10	0	6/16-10/ 5 not to exceed 52 days on NFS lands consistent with CLGMA. See Table 8	6/16-10/ 5 not to exceed 52 days on NFS lands consistent with CLGMA. See Table 8	6/16-10/ 5 not to exceed 52 days on NFS lands consistent with CLGMA. See Table 8
Grazing System	N/A	None	Rest-rotation consistent with CLGMA. BDNF Tenmile pasture would remain unallocated	Rest-rotation consistent with CLGMA. BDNF Tenmile pasture would be re-allocated	Rest-rotation consistent with CLGMA. BDNF Tenmile pasture would be grazed once every 3 years Aug 25-Oct 5
Allowable Use Levels	N/A	None	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend	Table 4 - Site specific based on PFC and trend
Miles of Fence	N/A	13.4	17.3	17.3	17.3
Miles of Pipe	N/A	0	0.1	0.1	0.1
Developed Water	N/A	0	1	1	1

¹⁴ This is the total Head Months permitted on both MFWP and BDNF lands included within the Seymour Allotment. The eventual decision, supported by analysis in this EIS, applies only to BDNF lands – specifically the Tenmile, Sullivan and Seymour Pastures.

Seymour					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Exclosures	N/A	0	1 campground	2 (1 campground +1 western toad breeding exclosure)	2 (1 campground +1 western toad breeding exclosure)
Avoidance Period ¹⁵	N/A	0	-	-	Yes - Tenmile Pasture
Monitoring	N/A	Occasional checks to determine cattle remain absent	-Compliance and Long-term rangeland. -Monitor livestock and wildlife use to evaluate mutual benefits and/or problems.	-Compliance and Long-term rangeland. -Monitor livestock and wildlife use to evaluate mutual benefits and/or problems.	-Compliance and Long-term rangeland. -Monitor livestock and wildlife use to evaluate mutual benefits and/or problems.

The Season of Use outlined in the 2011 CLGMA with MFWP identifies an early (June 16–Aug 15) and a late (Aug 15-Oct 5) season and a rest period. For the BDNF pastures (Seymour and Sullivan), the SOU and rest would match the adjoining MFWP pastures (Seymour Creek and Sullivan Creek). In Alternative 4, the BDNF's Tenmile Pasture may be grazed once every 3 years using a modified late season (Aug 25-Oct 5) to protect incubating and emerging WCT.

¹⁵ An avoidance period would be incorporated into the grazing system where livestock would periodically not graze specified WCT streams until after incubating WCT have emerged. This measure protects incubating and emerging WCT from livestock trampling.

Table 8: Seymour SOU by Pasture - 2011 CLGMA

Pasture	Year		
	2014	2015	2016
	2017	2018	2019
	2020	2021	2022
	2023	2024	2025
Seymour (BDNF), Sullivan (BDNF) Seymour Creek, Sullivan Creek	Early	Late	Rest
Tenmile Creek	Late	Rest	Early
Tenmile (BDNF) –Proposed Action & Alternative 4	Late	Rest	Rest
Salt Ridge	Late	Rest	Early
Moose Creek, Mule Ranch	Rest	Early	Late

Table 9 – Fishtrap Allotment

Fishtrap					
Description Item	Permitted	No Grazing	Current Mgmt	Proposed Action	Alternative 4
Permittees	2	0	2	2	2
Pastures	N/A	N/A	2	2	2
Head Months	535	0	460 ¹⁶	460	460
Livestock (cow/calf pairs)	152	0	152	152	152
Season of Use	6/16-9/30	N/A	6/16- 9/15	6/16-9/15	6/16-9/15
Grazing System	N/A	N/A	Deferred Rotation	Deferred Rotation	Rest Rotation
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend	Table 4 - Site specific based on PFC and trend
Miles of Fence	N/A	3.6	5.9	5.9	5.9
Monitoring	N/A	Occasional checks to determine cattle remain absent	Compliance and Long-term rangeland	Compliance and Long-term rangeland.	Compliance and Long-term rangeland

¹⁶ Head months for current management differ from permitted head months. The number presented here is based on actual use occurring since implementation of the 2009 Forest Plan Interim Livestock Grazing Standards.

Table 10 – Mudd Creek Allotment

Mudd Creek					
Description Item	Permitted	No Grazing	Current Mgmt	Proposed Action	Alternative 4
Permittees	1	0	1	1	1
Pastures	N/A	N/A	1	1	1
Head Months	414	0	414	414	414
Livestock (cow/calf pairs)	137	0	137	137	137
Season of Use	6/16-9/15	N/A	6/16-9/15	6/16-9/15	6/16-9/15
Grazing System	N/A	N/A	Deferred Entry	Deferred Entry	Rest rotation
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend	Table 4 - Site specific based on PFC and trend
Miles of Fence	N/A	8.9	12.3	12.4	12.4
Miles of Pipe	N/A	0	0.1	0.2	0.2
Developed Water	N/A	0	2	3 (+0.1 mile of fence)	3 (+0.1 mile of fence)
Exclosures	N/A	0	1	1	1
Monitoring	N/A	Occasional checks to determine cattle remain absent.	Compliance and Long-term rangeland.	-Compliance and Long- term rangeland. -Monitor effectiveness of mitigation/design features for water developments within 1 yr of construction.	-Compliance and Long- term rangeland. -Monitor effectiveness of mitigation/design features for water developments within 1 yr of construction. -Monitor Upper West Fork Mdw at least 1 yr in 3 to make sure AULs are not exceeded.

Table 11 – Pintler Creek Allotment

Pintler Creek					
Description Item	Permitted	No Grazing	Current Mgmt	Proposed Action	Alternative 4
Permittees	1	0	1	1	1
Pastures	N/A	N/A	1	1	1
Head Months	440	0	440	440	408
Livestock (cow/calf pair)	125	0	250	250	250
Season of Use	6/16-9/30	N/A	6/16-8/7	6/16-9/30 not to exceed 53 days	6/16 – 9/30 not to exceed 49 days
Grazing System	N/A	N/A	Partly deferred	Deferred Rotation	Deferred Rotation with periodic rest. Pintler Meadows rested for 10 yrs. Special Area (Sec 18) grazed once every 3 yrs not to exceed 20 head months
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend.	Table 4 - Site specific based on PFC and trend
Miles of Fence	N/A	6.5	9.8	9.9	10.2(+0.3 mile of drift fence)
Miles of Pipe	N/A	0	0.3	0.4	0.4
Developed Water	N/A	0	3	4 (+0.1 mile fence)	4 (+0.1 mile fence)
Exclosures	N/A	0	3 (1 campground, 1 permanent + 1 temporary)	3 (1 campground + 2 permanent)	3 ¹⁷ (1 campground + 2 permanent)
Stream Restoration	-	-	-	-	Plant willow cuttings in Pintler Meadows

¹⁷ An existing permanent exclosure would be designated as Pintler Allotment Special Area (see grazing system).

Pintler Creek					
Description Item	Permitted	No Grazing	Current Mgmt	Proposed Action	Alternative 4
Monitoring	N/A	Occasional checks to determine cattle remain absent	Compliance and Long-term rangeland	-Compliance and Long-term rangeland	-Compliance and Long-term rangeland. -Monitor effectiveness of mitigation/design features for tree removal, slash disposal and stumps within 1 yr of removal activity

Table 12 – Mussigbrod Allotment

Mussigbrod					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Permittees	1	N/A	1	1	1
Pastures	N/A	N/A	2	2	1 (for 10 yrs)
Co-Managed/ partners	N/A	N/A	BLM	BLM	BLM
Head Months	626	0	413 ¹⁸	325	248
Livestock (cow/calf pairs)	207	0	165	165	165
Season of Use	7/1-9/30	N/A	7/1-9/13	7/1-9/30 not to exceed 59 days	7/1-9/30 not to exceed 45 days
Grazing System	N/A	N/A	Deferred Rotation	Rest rotation	Rest rotation Rest Bender pasture for 10 years
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend	Table 4 - Site specific based on PFC and trend

¹⁸ Head months for current management differ from permitted head months. The number presented here is based on actual use occurring since implementation of the 2009 Forest Plan Interim Livestock Grazing Standards.

Mussigbrod					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Miles of Fence	N/A	7.2	12.7	13.8 (spring development and Bender Creek exclosure)	12.8 (spring development)
Miles of Pipe	N/A	0	0.5	0.6	0.6
Developed Water	N/A	0	5	6 (+0.1 mile of fence)	6 (+0.1 mile of fence)
Exclosures	N/A	0	3 (1 campground + 2 temporary)	3 (1 campground + 2 permanent)	2 (1 campground + 1 permanent) - Remove 1 existing temporary exclosure
Stream Restoration	-	-	-	-	Plant willow cuttings and install grade control structures in Bender Creek
Monitoring	N/A	Occasional checks to determine cattle remain absent	Compliance and Long-term rangeland.	-Compliance and Long-term rangeland. -Monitor effectiveness of mitigation/design features for water developments within 1 yr of construction.	-Compliance and Long-term rangeland. -Monitor effectiveness of mitigation/design features for water developments within 1 yr of construction. -Monitor effectiveness of mitigation/design features for slash disposal and stumps within 1 yr of tree removal.

Table 13 – Ruby Creek Allotment

Ruby Creek					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Permittees	2	0	2	2	2
Pastures	N/A	N/A	3	3	3
Head Months	714 (cattle)	0	714 (cattle)	714 (cattle)	613 (cattle)
	85 (horses)		85 (horses)	85 (horses)	72 (horses)
Livestock (cow/calf pairs and horses)	283 cattle	0	283 cattle	283 cattle	283 cattle
	28 horses	0	28 horses	28 horses	28 horses
Season of Use	6/16 - 9/30 cattle	N/A	6/16 - 9/30 cattle	6/16 - 9/30 cattle	7/1 - 9/30 cattle
	7/1-9/30 horses	N/A	6/16-9/15 horses	6/16-9/15 horses	7/1-9/15 horses
Grazing System	N/A	N/A	Partially Deferred for cattle	Partially Deferred for cattle	Deferred rotation with periodic rest incorporated for cattle. Entry in Cow Cr Pasture deferred until ~ Aug 1 every other yr.
			Butler Pasture- season long by horses	Butler Pasture- Rest rotation for horses	Butler Pasture- Rest rotation for horses
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend	Table 4 - Site specific based on PFC and trend
Miles of Fence	N/A	11.2	13.9	13.9	14.0 (+0.1 mile drift fence in Cow Creek pasture)
Miles of Pipe	N/A	0	0.1	0.1	0.1
Developed Water	N/A	0	1	1	1
Exclosures	N/A	0	4	4	4
Hardened Crossings	N/A	0	0	3	3

Ruby Creek					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Monitoring	N/A	-Occasional checks to determine cattle remain absent. -Update heritage site forms and evaluate impacts to Pioneer Town Site every 5 yrs.	-Compliance and Long-term rangeland. -Update heritage site forms and evaluate impacts to Pioneer Town Site every 2 yrs.	-Compliance and Long-term rangeland. -Update heritage site forms and evaluate impacts to Pioneer Town Site every 2 yrs.	-Compliance and Long-term rangeland. -Update heritage site forms and evaluate impacts to Pioneer Town Site every 2 yrs.

Table 14 – Dry Creek Allotment

Dry Creek					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Permittees	1	0	1	1	1
Pastures	N/A	N/A	2	2	2
Co-Managed/ partners	BLM	N/A	BLM	BLM	BLM
Head Months	302	0	222 ¹⁹	222	222
Livestock (cow/calf pairs)	100	0	150	150	150
Season of Use	7/1-9/30	N/A	8/10-9/23	8/10-9/23	8/10-9/23
Grazing System	N/A	N/A	Deferred Rotation	Rest Rotation	Rest Rotation
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend	Table 4 - Site specific based on PFC and trend
Miles of Fence	N/A	7.0	8.5	8.5	8.5
Miles of Pipe	N/A	0	0.1	0.1	0.1
Developed Water	N/A	0	1	1	1

¹⁹ Head months for current management differ from permitted head months. The number presented here is based on actual use occurring since implementation of the 2009 Forest Plan Interim Livestock Grazing Standards.

Dry Creek					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Exclosures	N/A	0	1 (campground)	1 (campground)	1 (campground)
Monitoring	N/A	Occasional checks to determine cattle remain absent	Compliance and Long-term rangeland	Compliance and Long-term rangeland	Compliance and Long-term rangeland

Table 15 – Twin Lakes Allotment

Twin Lakes					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Permittees	2	0	2	2	2
Pastures	N/A	N/A	4	4	4
Head Months	418 ULBL ²⁰	0 ULBL	249 ²¹ ULBL	249 ULBL	249 ULBL
	551 ULLL ²²	0 ULLL	360 ULLL	360 ULLL	360 ULLL
Livestock (cow/calf pairs)	132 ULBL	0 ULBL	166 ULBL	166 ULBL	166 for ULBL
	174 ULLL	0 ULLL	174 ULLL	174 ULLL	174 ULLL
Season of Use	6/26-9/30	N/A	7/15-9/12 ULBL -up to 45 days	7/15-9/12 ULBL – up to 45 days	7/15-9/12 ULBL - up to 45 days
			7/10-9/10 ULLL	7/10-9/10 ULLL	7/10-9/10 ULLL
Grazing System	N/A	N/A	ULBL - Deferred	ULBL – Rest rotation	ULBL – Rest Rotation
	N/A	N/A	ULLL – Rest Rotation	ULLL – Rest Rotation	ULLL – Rest Rotation
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend.	Table 4 - Site specific based on PFC and trend
Miles of Fence	N/A	4.9	8.4	8.4	8.4

²⁰ ULBL = Upper and Lower Big Lake

²¹ Head months for current management differ from permitted head months. The number presented here is based on actual use occurring since implementation of the 2009 Forest Plan Interim Livestock Grazing Standards.

²² ULLL = Upper and Lower Little Lake

Twin Lakes					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Monitoring	N/A	Occasional checks to determine cattle remain absent	Compliance and Long-term rangeland	Compliance and Long-term rangeland	Compliance and Long-term rangeland

Table 16 – Monument Allotment

Monument					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Permittees	1	0	1	1	1
Pastures	N/A	N/A	2	2	2
Head Months	868	0	868	868	868
Livestock (cow/calf pairs)	300	0	300	300	300
Season of Use	7/20-10/15	N/A	7/20-10/15	7/20-10/15	7/20-10/15
Grazing System	N/A	N/A	Deferred Rotation	Deferred Rotation	Rest Rotation
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend	Table 4 - Site specific based on PFC and trend
Miles of Fence	N/A	14.5	17.9	17.9	17.9
Number of Exclosures	N/A	0	1 (campground)	1 (campground)	1 (campground)
Monitoring	N/A	Occasional checks to determine cattle remain absent	Compliance and Long-term rangeland.	Compliance and Long-term rangeland.	Compliance and Long-term rangeland.

Table 17 – Pioneer Allotment

Pioneer					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Permittees	1	0	1	1	1
Pastures	N/A	N/A	3	3	3
Head Months	792	0	542 ²³	542	542
Livestock (cow/calf pairs)	250	0	250	250	250
Season of Use	6/26-9/30	N/A	7/7-9/10	7/7-9/10	7/7-9/10
Grazing System	N/A	N/A	Deferred Rotation	Deferred Rotation	Rest Rotation
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend	Table 4 - Site specific based on PFC and trend
Miles of Fence	N/A	14.3	17.6	17.6	17.6
Exclosures	N/A	0	1 (campground)	1 (campground)	1 (campground)
Monitoring	N/A	Occasional checks to determine cattle remain absent	Compliance and Long-term rangeland	Compliance and Long- term rangeland	Compliance and Long- term rangeland

²³ Head months for current management differ from permitted head months. The number presented here is based on actual use occurring since implementation of the 2009 Forest Plan Interim Livestock Grazing Standards.

Table 18 – Saginaw Allotment

Saginaw					
Description Item	Permitted	No Grazing	Current Mgmt.	Proposed Action	Alternative 4
Permittees	2	0	2	2	2
Pastures	N/A	0	4	4	4
Head Months	1210	0	690 ²⁴	690	620
Livestock (cow/calf pairs)	400	0	300	300	300
Season of Use	7/1-9/30	N/A	7/10-9/17	7/10-9/17	Pastures 1-3, 7/17-9/17. Pasture 4, 8/26-9/17 with no more than 150 pairs.
Grazing System	N/A	N/A	Rest Rotation	Rest Rotation	Rest Rotation
Allowable Use Levels	N/A	N/A	Table 3 – Forest Plan Interim Standards	Table 4 - Site specific based on PFC and trend	Table 4 - Site specific based on PFC and trend
Avoidance Period	N/A	N/A	None	None	7/10-8/25
Miles of Fence	N/A	16.5	24.3	24.3	24.3
Miles of Pipe	N/A	0	0.6	0.6	0.6
Developed Water	N/A	0	6	6	6
Avoidance Period ²⁵	N/A	0	-	-	Yes
Monitoring	N/A	Occasional checks to determine cattle remain absent	Compliance and Long-term rangeland	Compliance and Long- term rangeland	Compliance and Long- term rangeland

²⁴ Head months for current management differ from permitted head months. The number presented here is based on actual use occurring since implementation of the 2009 Forest Plan Interim Livestock Grazing Standards.

²⁵ An avoidance period would be incorporated into the grazing system where livestock would periodically not graze specified WCT streams until after incubating WCT have emerged. This measure protects incubating and emerging WCT from livestock trampling.